Appl. No. : 10/574,127 Filed : March 31, 2006

AMENDMENTS TO THE CLAIMS

- (Currently Amended) A method for drying soil in preparation for analysis including comprising the steps of:
 - (a) increasing the surface area of the soil;
 - (b) forcing a substantially inert gas through the soil; and
 - (c) subjecting the soil to an elevated temperature that does not exceed approximately 50°C .
- (Original) The method of claim 1 wherein the sample is prepared for analysis after approximately 1 hour of processing via steps (a) to (c).
- 3. (Original) The method of claim 1 wherein the sample is prepared for analysis after approximately 20 minutes of processing via steps (a) to (c).
- 4. (Currently Amended) The method as claimed in any of the above claims of claim 1 wherein the moisture content after steps (a) to (c) is less than approximately 9% wt.
- (Currently Amended) The method of claim 1 wherein said increasing the surface area of the soil as elaimed in any of the above claims wherein the increase in surface area during step (a) is-completed by comprises breaking the soil down into smaller particles by mechanical motion.
- (Currently Amended) The method of claim 1 wherein said increasing the surface area of the soil results in a as claimed in any of the above claims wherein the mean particle size after step (a) is of substantially less than 10mm.
- 7. (Currently Amended) The method as elaimed in any of the above claims of claim $\underline{1}$ wherein the said substantially inert gas of step (b) is air.
- (Currently Amended) The method as elaimed in any of the above claims of claim
 wherein said substantially inert gas of step (b) is free of moisture free.
- 9. (Currently Amended) The method as elaimed in any of the above claims of claim 1 wherein said substantially inert gas of step (b) is conditioned via dehumidifications.
- 10. (Currently Amended) The method as claimed in any of the above claims of claim <u>h</u>wherein the <u>said substantially</u> inert gas of step (b) is conditioned by use of a desiccating agent to remove moisture from the gas.

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11. (Currently Amended) The method as claimed in any of the above claims of claim 1 wherein the substantially inert gas of step (b) is forced across the soil particles produced from step (a).

- (Currently Amended) The method as elaimed in of claim 11 wherein said forcing a substantially inert gas through the soil comprises the use of fan forced substantially inert gasthe inert gas is fan forced.
- 13. (Currently Amended) The method of claim 11 or claim 12 wherein the <u>flow of the</u> forced substantially inert gas flow is less than 4 m/s.
- (Currently Amended) The method of claim 11 as elaimed in any of elaims-11-to
 wherein the flow of the forced substantially inert gas flow is approximately 2 m/s.
- 15. (Currently Amended) The method of claim 1 as elaimed in any of the above elaims-wherein the elevated temperature during step (c) to which the soil is elevated is high enough to allow sample drying without impacting on the chemical and/or physical properties to be measured.
- (Currently Amended) The method of claim 1 as claimed in any of the above claims—wherein the elevated temperature during step (c) ranges from approximately 20°C to 50°C.
- (Currently Amended) The method of claim 1 as elaimed in any of the above elaims—wherein the elevated temperature during step (c) ranges from approximately 30°C to 40°C.
- (Currently Amended) The method of claim 1 as claimed in any of the above elaims-wherein the elevated temperature during step (c) is approximately 35°C.
- (Currently Amended) The method of <u>claim las elaimed in any of the above</u> elaims wherein step (c) comprises the use of <u>drying equipment that is preheated the drying equipment is preheated before step (c)</u>.
- (Currently Amended) The method of claim 1 as elaimed in any of the above claims wherein the method includes a further step (d) of further comprising:

(d) moving the soil.

 (Currently Amended) The method as elaimed in of claim 20 wherein the particles remain moving for substantially all of the drying time. Appl. No. : 10/574,127 Filed : March 31, 2006

22. (Currently Amended) An assembly for drying of soil comprising:

- (a) an inert gas supply device which is capable of forcing inert gas through a soil sample; and
- (b) a heating element which is capable of subjecting the soil to an elevated temperature of less than approximately 50°C.
- 23. (Currently Amended) The assembly as claimed inof claim 22 wherein the assembly further includes a soil crusher device which is capable of increasing the surface area of the soil.
- (Currently Amended) The assembly as-elaimed inof claim 22 or elaim 23 where
 the assembly further includes a device capable of keeping the soil in motion.
 - (Cancelled)
 - 26. (Cancelled)
- (New) The assembly of claim 23 further comprising a device capable of keeping the soil in motion.
- 28. (New) The method of claim 12 wherein flow of the forced substantially inert gas is approximately $2\,\mathrm{m/s}$.
- (New) The method of claim 13 wherein the flow of the forced substantially inert gas is approximately 2 m/s.
- 30. (New) The method of claim 12 wherein the flow of the forced substantially inert gas is less than 4 m/s.